

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) ~~Data-~~A data representation apparatus
for representing data by means of an audio signal, said data
representation apparatus comprising:
- an audio processing unit ~~arranged to deliver~~for delivering
5 the audio signal with a characteristic dependent upon a
~~positionless data variable capable of signal~~ having at least a first
value and a second value; and
~~characterized in that~~
- ~~the data representation apparatus comprises a mapping~~
10 ~~unit, arranged to map~~ for mapping the first value of the data
~~variable-signal~~ to a first position in three-dimensional space, and
the second value of the data variable-signal to a second position
in three-dimensional space; and,
~~wherein the audio processing unit is arranged to~~
15 ~~exchange~~ changes the characteristic ~~of the audio signal~~, resulting in
the audio signal appearing to a user listening to the audio
signal to originate from the first position ~~for when the data~~
~~variable having signal has the first value, respectively and from~~
the second position ~~for when the data variable having signal has~~
20 ~~the second value, to a user listening to the audio signal.~~

2. (Currently Amended) ~~Data-~~The data representation apparatus
as claimed in claim 1, wherein the audio processing unit comprises

a filter for applying a head related transfer functions to an input audio signal to obtain the output audio signal appearing to

originate from the first position ~~respectively and the second~~ position.

3. (Currently Amended) ~~Data-The data~~ representation apparatus as claimed in claim 1, ~~comprising wherein said data representation apparatus further comprises a data variable-signal distributor, capable of for~~ delivering the data variable-signal derivable from a measurement from a measurement device, to the audio processing unit.

4. (Currently Amended) ~~Data-The data~~ representation apparatus as claimed in claim 1, wherein the mapping unit ~~is arranged to map~~ maps a collection of nominal values of the data variable-signal to predetermined regions of three-dimensional space.

5. (Currently Amended) ~~Data-The data~~ representation apparatus as claimed in claim 1, wherein the mapping unit ~~is arranged to map~~ maps a collection of numerical values of the data variable signal to positions on a curvilinear locus in three-dimensional space.

6. (Currently Amended) ~~Data-The data~~ representation apparatus as claimed in claim 1, wherein ~~said data representation apparatus further comprises~~ specification means ~~are comprised, arranged to~~

~~allow a specification of for specifying~~ a preferred mapping for the
5 mapping unit.

7. (Currently Amended) ~~Data~~ The data representation apparatus
as claimed in claim 1, wherein ~~said data representation apparatus~~
~~further comprises selection means are present, arranged to allow for~~
~~enabling~~ presentation of a first set of data variable-signal values
5 by a first type of the audio signal and a second set of data
~~variable-signal~~ values by a second type of the audio signal.

8. (Currently Amended) A system for representing data by means
of an audio signal, ~~said system comprising:~~

... an audio source ~~arranged to deliver for~~ supplying an input
audio signal;

5 ... a source of a data variable-capable-of-signal having at
~~least~~ a first value and a second value;

... a sound production device; and

... a data representation apparatus for representing data by
means of the audio signal,

10 ~~wherein the data representation apparatus comprising comprises:~~

... an audio processing unit ~~arranged to deliver for~~ providing
the audio signal to the sound production device with a

characteristic dependent on the value of the data variable-signal;

~~and~~

15 ~~characterized in that~~

~~the data representation apparatus further comprises a mapping unit, arranged to map by means of a for mapping the first value of the data variable signal to a first position in three-dimensional space, and the second value of the data variable signal to a second position in three-dimensional space, and, wherein the audio processing unit is arranged to change the characteristic of the audio signal, resulting in the audio signal appearing, to a user listening to the audio signal, to originate from the first position for when the data variable having signal has the first value respectively, and from the second position for when the data variable having signal has the second value, to a user listening to the audio signal.~~

9. (Currently Amended) A method of representing data by means of an audio signal, said method comprising the steps of:

~~an audio processing step and delivering the audio signal with a characteristic dependent on a data variable, capable of signal having at least a first value and a second value, and characterized in that~~

~~a mapping is effected mapping the first value of the data variable signal to a first position in three-dimensional space, and the second value of the data variable signal to a second position in three-dimensional space, and,~~

~~wherein the audio processing and delivering step changes includes changing the characteristic of the audio signal, resulting in the audio signal appearing, to a user listening to the audio~~

15 | ~~signal. to originate from the first position for when the data~~
| ~~variable having signal has the first value respectively, and from~~
| ~~the second position for when the data variable having signal has the~~
| ~~second value, to a user listening to the audio signal.~~

10. (Currently Amended) ~~A computer-readable medium having~~
| ~~stored thereon a~~ computer program for execution by a processor,
| enabling the processor to execute the method of claim 9.

11. (Cancelled).